REMARKS

Applicants thank the Examiner for the very thorough consideration given the present application.

Claims 1-2, 4-13 and 15-21 are now pending in this application. Claims 1 and 10 are independent. Claims 3 and 14 have been cancelled. Claims 1, 4-5, 9-10 and 15-16 have been amended. Claims 20-21 have been added.

Reconsideration of this application, as amended, is respectfully requested.

Objection to the Title

The Examiner has objected to the title as being non-descriptive. Applicants have changed the title so as to be more descriptive of the distinguishing features of the present invention over the prior art of record.

Rejections Under 35 U.S.C §§ 102 and 103

Claims 1-3 stand rejected under 35 U.S.C § 102(b) as being anticipated by Rasaat (EP 0338703). Claims 4-5 stand rejected under 35 U.S.C § 103(a) as being unpatentable over Rasaat in view of Hennessy et al. Claims 6-8 stand rejected under 35 U.S.C § 103(a) as being unpatentable over Rasaat in view of Lu. Claim 9 stands rejected under 35 U.S.C § 103(a) as being unpatentable over Rasaat in view Lu and further in view of Hennessy et al. Claims 10-14 stand rejected under 35 U.S.C § 103(a) as being over of Rasaat in view of Lu. Claims 15-19 stand rejected under 35 U.S.C § 103(a) as being unpatentable over Rasaat in view of Lu and further in view of Hennessy et al. These rejections are respectfully traversed.

Rasaat shows a head-up display for a motorcycle. An image is shown on a windscreen of the motorcycle at side areas 36 and/or 38. In an alternate

embodiment, the image may be projected onto a central surface 40, above the central line of sight and not to the side thereof. See column 3, lines 48-52.

The image projected onto the screen is a two-dimensional image. Rasaat details several projectors and details that the image includes at least four characters. See column 4, lines 1-15. As illustrated in Fig. 5, the display data 104 includes a velocity 106 and an RPM 108. Again, it is stated that "the data is displayed to one side of the field of view." See column 5, lines 36-37.

The present invention is quite distinct from the invention of Rasaat. Independent claims 1 and 10 recite respective combinations of structural features. Each combination includes an image located in a peripheral field on the screen, "wherein said image is a stripe or linear pattern extending in a horizontal direction."

As set forth in Applicants' Summary of the Invention, on page 3 in paragraphs 9-11, presenting the image in a stripe or linear pattern is an advantage over the background art. Particularly, an "image having a stripe or linear pattern can be more easily recognized by a driver as compared with an image having a dot pattern." See page 3, lines 9-11. Further, since "the image has a pattern extending longer in the horizontal direction, it does not interfere with the driver's view when the driver's eyes move right and left." See page 3, lines 21-23. Therefore, presenting the image in the form of a stripe or linear pattern extending in a horizontal direction is an important feature of the present invention, when taken in the combinations of Applicants' independent claims 1 and 10.

Rasaat does not show or suggest presenting an image in a stripe or linear pattern extending a horizontal direction. Rather, as illustrated in Fig. 5, the image is a collection of characters presented on a side, peripheral area of the wind screen. Such a display is in accordance with Applicants' background art. Further, such a display tends to interfere with the driver's view, when the driver's eyes move right and left.

Added claims 20-21 recite that the peripheral portion of the screen which includes the image is located in the bottom side peripheral field. Rasaat shows the image located on a right or left side peripheral field 36,38. Rasaat suggests that the image position can be altered to be projected onto a surface 40, such that it appears above the central line of sight and not at the side thereof. See column 3, lines 50-52. However, Rasaat makes no suggestion of placing the image in a bottom side of the peripheral field.

Hennessy et al. has been cited as a teaching reference for the display of information within a certain range of degrees of the central field of view of the user. Hennessy et al. does not cure the deficiencies of Rasaat, as discussed above.

Lu has been cited as a teaching reference for a projection display. Lu also fails to cure the deficiencies of Rasaat as discussed above.

For the reasons as stated above, reconsideration and withdrawal of these rejections are respectfully requested.

CONCLUSION

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn.

It is believed that a full and complete response has been made to the Office Action, and as such, the present application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Mr. Scott L. Lowe (Reg. No. 41,458) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and further replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASH & BIRCH, LLP

By _____ #41,458
James M. Slattery, #28,380

P.O. Box 747
Falls Church, VA 22032-0747
(703) 205-8000

JMS/SLL:lmh

Enclosure: Version with Markings to Show Changes Made

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Title of the Invention

The title of the invention has been amended as follows:

--HEAD-UP DISPLAY FOR A MOTORCYCLE HAVING A HORIZONTAL STRIPE OR LINEAR PATTERN IN A PERIPHERAL FIELD OF VIEW OF A SCREEN--

In the Claims

Claims 3 and 14 have been canceled.

The claims have been amended as follows:

1. (Amended) A head-up display for a motorcycle, which is adapted to inform a driver of traffic information by display of an image projected on a screen provided in front of a riding position of a driver, wherein when a visual field for a driver who takes a riding posture and turns his or her eyes to the front side is divided into a central field and a peripheral field surrounding said central field, said image is located in said peripheral field on said screen, and wherein said image is a stripe or linear pattern extending in a horizontal direction.

4. (Amended) The head-up display for a motorcycle according to claim 1, wherein [said image has a stripe or linear pattern extending in the horizontal direction, and] a width of said image in said horizontal direction is determined so that an angle formed between two lines extending from a point in said central field to both ends of said image becomes at least 20°.

5. (Amended) The head-up display for a motorcycle according to claim 1, wherein a width of said image in [a] said horizontal direction satisfies a relationship of $20° \leq \theta 3 < \theta 4$, where:

$\theta 3$ is an angle formed between two lines extending from an uppermost point of said central field to both ends of said image; and

$\theta 4$ is an angle formed between two additional lines extending from a lowermost point of said central field to said both ends of said image.

9. (Amended) The head-up display for a motorcycle according to claim 8, wherein a width of said image in [a] said horizontal direction satisfies a relationship of $20° \leq \theta 3 < \theta 4$, where:

$\theta 3$ is an angle formed between two lines extending from an uppermost point of said central field to both ends of said image; and

$\theta 4$ is an angle formed between two additional lines extending from a lowermost point of said central field to said both ends of said image.

10. (Amended) A head-up display for a motorcycle, comprising:

a projector which produces an image; and

a screen on which said image is displayed, said screen having a peripheral portion located in a peripheral field of view of a driver, said peripheral field of view being an area outside of a central field of view of the driver, said central field of view extending approximately 6 degrees in a vertical direction as defined for 90% of all drivers in a riding posture on the motorcycle,

wherein said image is displayed in said peripheral field of view, and wherein said image is a stripe or linear pattern extending in a horizontal direction.

15. (Amended) The head-up display for a motorcycle according to claim

10, wherein a width of said image in [a] said horizontal direction is determined so that an angle formed between two lines extending from a point in the central field of view to both ends of the image is at least 20°.

16. (Amended) The head-up display for a motorcycle according to claim 10, wherein a width of said image in [a] said horizontal direction satisfies a relationship of $20° \leq \theta 3 < \theta 4$, where:

$\theta 3$ is an angle formed between two lines extending from an uppermost point of said central field of view to both ends of said image; and

$\theta 4$ is an angle formed between two additional lines extending from a lowermost point of said central field of view to said both ends of said image.

Claims 20-21 have been added.